



HOW BANKS ARE RESPONDING TO THE FINANCIAL RISKS OF CLIMATE CHANGE

MAY 2020

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INTRODUCTION

The Covid-19 outbreak brings into sharp relief the need to address sustainability risks and improve societal resilience. In its Renewed Sustainable Finance Strategy, which is open for consultation until 15 July 2020, the European Commission sends a clear message: the pandemic has not postponed European long-term sustainability objectives. The EU's sustainable finance agenda will in fact be a crucial factor in the economic recovery in response to Covid-19 and the financial sector will play a key part in mobilising the necessary capital.

Climate change poses a threat to financial stability and the safety and soundness of financial firms, in two ways: physical risks and transition risks. Physical risks relate to the increasing frequency and severity of extreme weather events and longer-term shifts in climate, which cause physical damage to the value of financial assets as well as collateral held by banks. Transition risks arise from the adjustments being made in order to develop a low-carbon economy. They may also lead to significant changes in asset values, and a higher cost of doing business.

These risks are increasingly taken into account across the financial system. Regulators – for their part – have demonstrated an interest in climate change issues, notably since the Paris “One Planet Summit” in December 2017, when eight central banks and supervisors established a Network for Greening the Financial System (NGFS). The NGFS had grown to 54 members and 12 observers by the end of 2019, and proposed recommendations to help the financial system achieve the Paris Agreement objectives in its first report *A call for action* published on 17 April 2019.

In light of the growing regulatory interest, in February 2020, Mazars and the Official Monetary and Financial Institutions Forum (OMFIF) came together to produce a global report¹ providing a unique insight on current and upcoming financial regulatory developments aimed at tackling climate change. Based on a survey of 33 central banks and regulatory authorities across the world, the report confirms that most respondents now see climate risks as an important issue and acknowledge that a long-term response is needed.

Among regulators, the Prudential Regulation Authority (PRA) has been a pioneer in addressing the financial risks of climate change. According to its supervisory statement *Enhancing banks' and insurers' approaches to managing*

*the financial risks from climate change*² published in April 2019, the PRA expects regulated entities to adopt a board-level strategic approach to tackle this new financial risk factor, and to incorporate it into their governance, risk management, scenario analysis and disclosure arrangements.

In addition, both the Dutch Central Bank (De Nederlandsche Bank, DNB) and the German Federal Financial Supervisory Authority (BaFin) have issued guidance papers³ covering governance and risk management⁴.

These supervisory papers testify to the regulators' will to encourage banks to actively embed climate-related risks in their business operations and risk management frameworks. Against this background we have analysed how 30 of the largest banks worldwide have been handling climate-related financial risks by consulting their most recently publicly-disclosed information. The objective of this study is to assess the extent to which banks have integrated climate change in the areas of governance, risk management, scenario analysis and disclosures, and their level of readiness for recent and upcoming climate-related supervisory expectations.



Leila Kamdem-Fotso
Partner, Financial Services

1. Mazars and OMFIF, *Tackling climate change: The role of banking regulation and supervision*, February 2020

2. PRA Supervisory Statement SS3/19 *Enhancing banks' and insurers' approaches to managing the financial risks from climate change*, April 2019

3. DNB, *Good Practice Guide: Integration of climate-related considerations into banks' risk management*, November 2019 and BaFin, *Guidance Notice on Dealing with Sustainability Risks*, December 2019

4. The scope covered by each of these papers is quite different: DNB's paper also covers disclosure while BaFin's paper includes stress tests and scenario analysis.

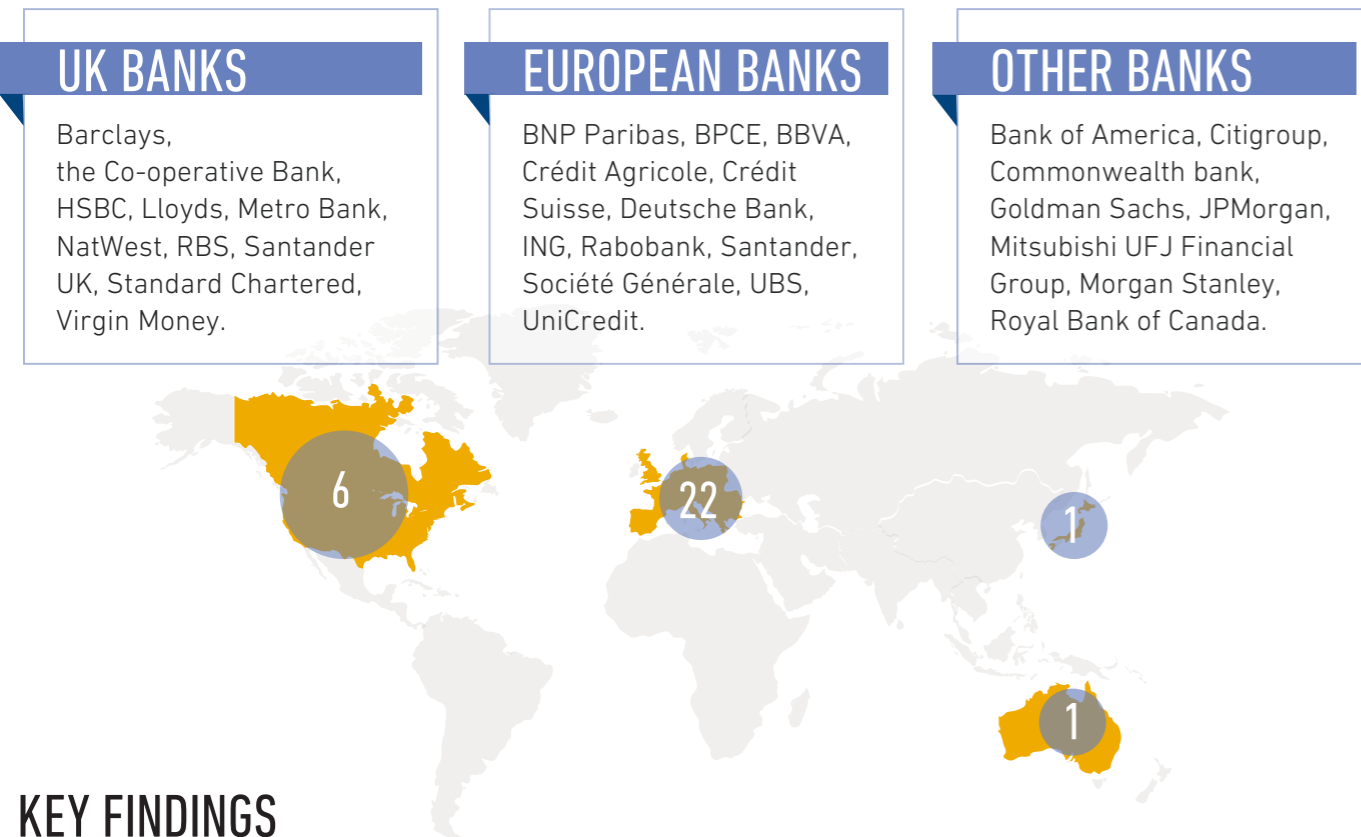
EXECUTIVE SUMMARY

METHODOLOGY

Sources of information: publicly available information (recent annual reports, sustainability reports, climate change statements etc.).

Areas of study: current practices around climate-related governance, risk management, scenario analysis and disclosures.

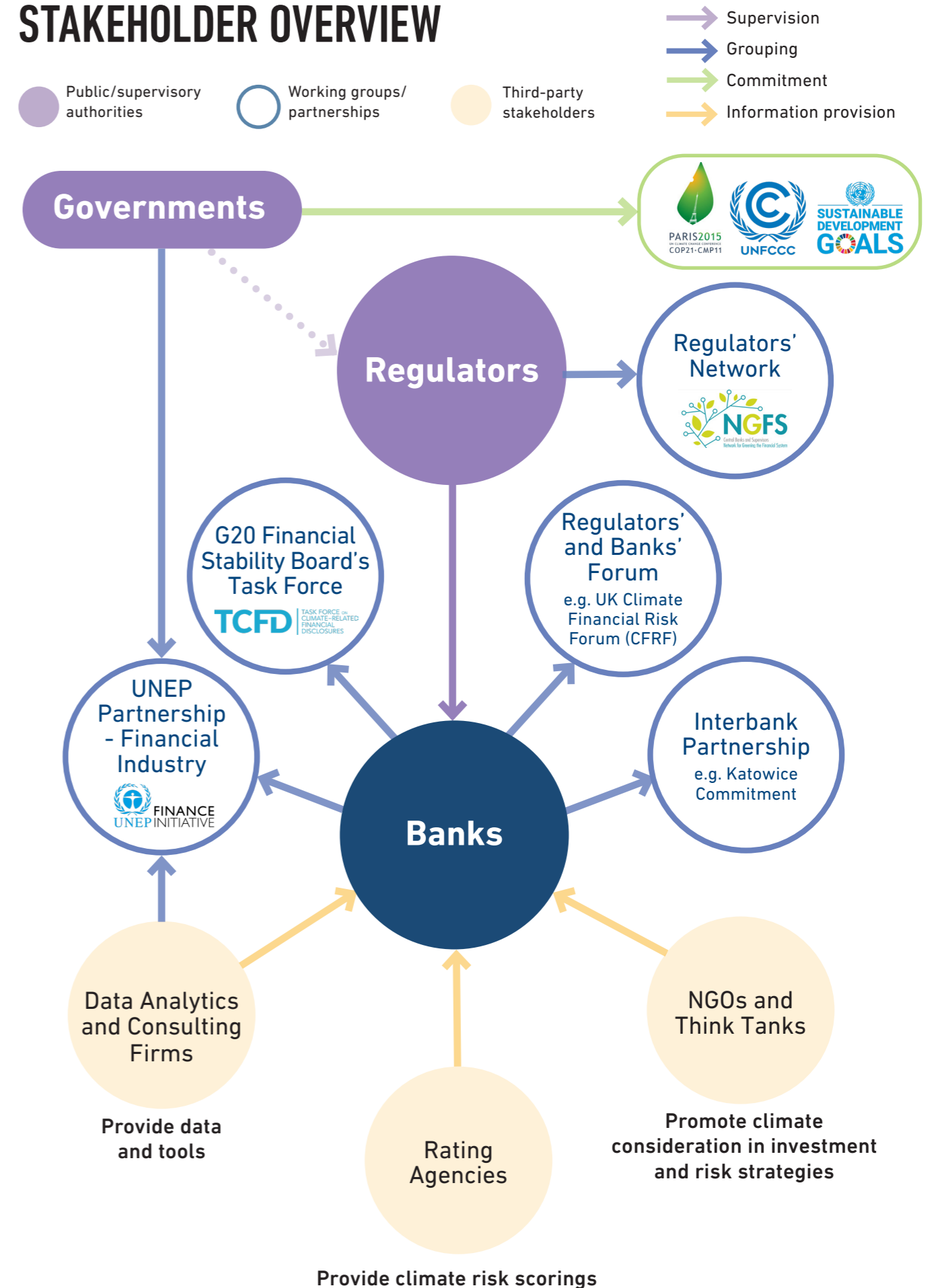
Scope: a pool of 25 largest banks based on their size of assets according to the 2018 S&P Global Market Intelligence report and 5 additional UK banks.



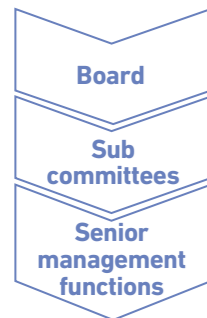
KEY FINDINGS

- | | | | |
|---|---|---|--|
| <p>Governance</p> <ul style="list-style-type: none"> Wide adoption of climate-dedicated governance arrangements Accountability for climate-related matters has been assigned – in most cases – to CSR functions. | <p>Risk management</p> <ul style="list-style-type: none"> Climate change is recognised as an aggravating factor of existing risks Improved methodologies and tools are needed for greater measurement. | <p>Scenario analysis</p> <ul style="list-style-type: none"> This is the most challenging area to make progress in There is a lack of comparable and good quality data at sector and borrower levels There are difficulties with the modelling of financial impacts of climate change. | <p>Disclosure</p> <ul style="list-style-type: none"> A wide consensus exists around the Task Force on Climate-related Financial Disclosures (TCFD) framework There is an overall lack of detail and consistency in the information currently disclosed. |
|---|---|---|--|

STAKEHOLDER OVERVIEW



GOVERNANCE

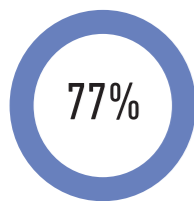


Regulatory expectations

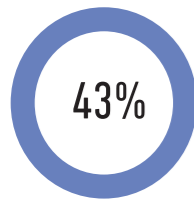
Regulatory guidelines highlight the importance of having a clear organisational structure with well-defined responsibilities and board oversight.

In particular, roles and responsibilities for managing climate-related financial risks shall be clearly distributed between the board, its relevant sub-committees and the holders of senior management functions (SMF).

KEY FIGURES

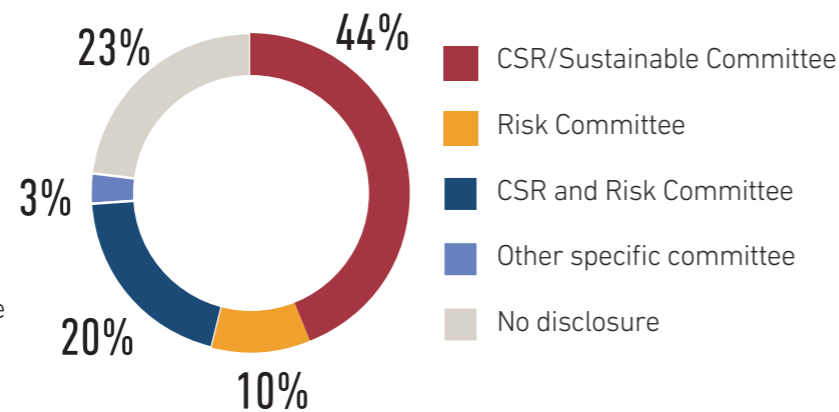


Of banks analysed have climate-related risks reviewed by the board of directors through their sub-committees.



Of banks analysed have launched cross-functional working groups on climate change and TCFD reporting.

How banks currently allocate responsibilities for climate-related risks among board's sub-committees.



KEY TAKEAWAYS

The CSR function is accountable for managing sustainability matters, including climate change, in 30% of cases. This responsibility is allocated to the risk function in 17% of cases.

The inclusion of climate-related indicators in remuneration policies is still at an early stage. Out of our sample of 30 banks, two banks have already included sustainability goals in the remuneration of senior executives and two are considering changes to their remuneration policies.

The main organisational models observed in banks to address climate-related risks and opportunities are:

- CSR teams at central level
- Cross-functional teams (sustainability, risk and business lines)

Banks are training their professionals to enhance their climate change knowledge and expertise, especially within their risk divisions.

What could restrict the board oversight of climate-related issues⁵?

- Competing board priorities
- Complexity of climate change and related financial risk measurements
- The longer time frames associated with climate change compared to typical business planning.

5. Source: World Economic Forum: *How to set up effective climate governance on corporate Boards*, January 2019

RISK MANAGEMENT

- ① Identification
- ② Measurement
- ③ Mitigation
- ④ Monitoring
- ⑤ Reporting

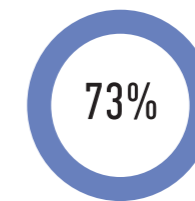
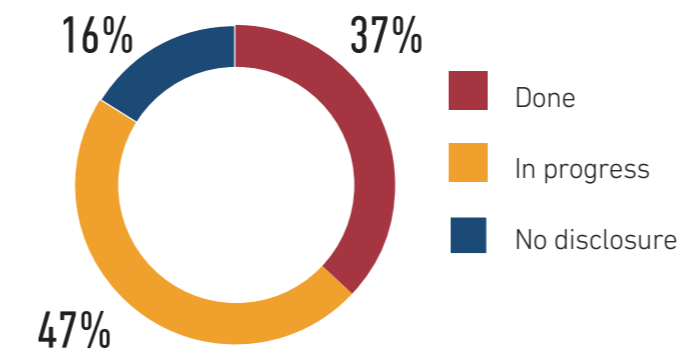
Regulatory expectations

Regulators suggest banks integrate climate change in their existing risk management frameworks, in line with their board-approved risk appetite.

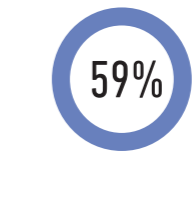
However, the five steps of a bank's risk management framework (identification, measurement, mitigation, monitoring, reporting) should be iterative as the nature of the financial risks from climate change requires a strategic approach. Besides, the challenge of data availability, notably at geospatial- and counterparty-level, needs to be resolved urgently to allow for a quality assessment of climate risks.

KEY FIGURES

Do the banks analysed address climate risks through their risk management framework?



Of the banks analysed have put exclusion policies in place aimed at reducing their involvement in carbon intensive sectors.



Of the banks analysed strengthened these exclusion policies in 2018.

KEY TAKEAWAYS

Nearly all sampled banks recognise the materiality of climate-related risks – both physical and transition.

However, their main focus is currently on measuring the impact of transition risks on credit risk. Methodologies to assess physical risks appear to be at an earlier stage, notably due to a lack of both asset-level data on borrowers and spatial analysis skills within banks.

For most banks, the assessment of climate-related financial risks is more qualitative than quantitative, and mainly focuses on the identification of high-risk sectors.

This is reflected in the adoption of sector exclusion policies. Sectors subject to such policies typically include:

- Coal mining
- Coal-fired power plants
- Arctic oil and gas
- Oil sands

Climate-related risks are identified as:



Significant emerging risks
They are being reported on a regular basis to the senior management and the board.



Aggravating factors of traditional risks
Banks particularly focus on credit risk, the most important risk that they face.

SCENARIO ANALYSIS

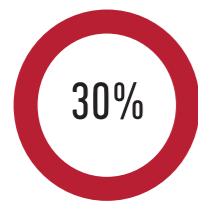
Regulatory expectations

With regulators working on scenarios for climate-related stress test at both international (NGFS, ECB) and national levels (PRA, Banque de France, Deutsche Bundesbank), banks need to strengthen their scenario analysis capabilities.



Climate scenario analysis is an exploratory exercise based on plausible future situations. It helps to quantify exposures to physical and transition risks and to assess the resilience of banks' business strategies. Notably, scenario analysis is an important feature of the TCFD disclosure framework.

KEY FIGURES



Of banks analysed participated in the UNEP FI working group to develop risk assessment methodologies.

Use of scenario analysis by banks

- 18 banks In use
- 6 banks Plan to use within 2 years
- 6 banks No disclosure

KEY TAKEAWAYS

Scenario analysis appears to be the most challenging component of climate-related risk management.

More than half of banks declare using scenario analysis but still in 'pilot' mode, as they await more mature methodologies and tools to improve their performance.

The United Nations Environment Programme Finance Initiative: pilot scenario analysis⁶

- Transition risks:** the pilot tested transition risk impact on corporate lending portfolios under three scenarios, representing a 1.5°C, 2°C, and 4°C increase in global average temperature by the end of the century.
- Physical risks:** the pilot assessed under 2°C and 4°C pathways the impact of extreme weather events and incremental shifts in climate conditions on three industries: agriculture, energy and real estate.

6. UNEP FI, *Extending our horizons*, April 2018, with the help of Oliver Wyman and Mercer; and *Navigating a new climate*, July 2018, with the help of Acclimatise Ltd

DISCLOSURE



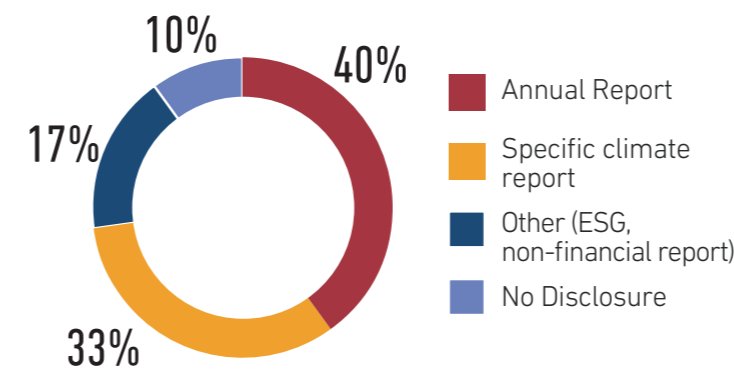
Regulatory expectations

Regulators recommend banks to consider disclosing how climate-related financial risks are integrated into governance and risk management processes, following existing frameworks such as the TCFD recommendations.

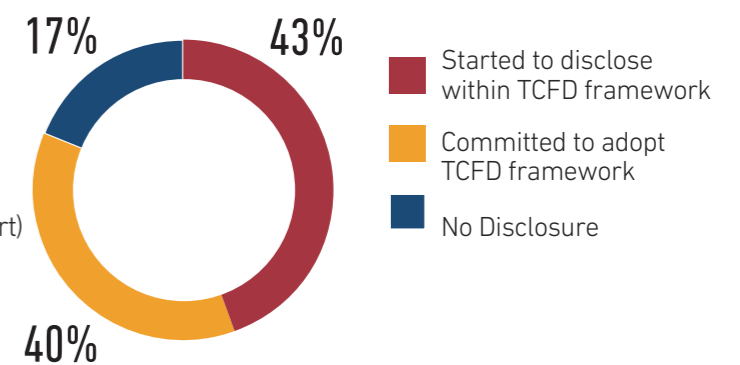
The Mazars-OMFIF report revealed that there is currently a weak appetite for mandatory disclosures. However, the French Law on the Energy Transition requires all listed companies to disclose climate-related financial risks. In the UK, the FCA is currently consulting on requiring listed companies to disclose TCFD reports or explain non-compliance.

KEY FIGURES

Types of reports used for climate disclosures



Endorsement of the TCFD framework



KEY TAKEAWAYS

Support for the TCFD recommendations is almost unanimous but climate-related information is not yet disclosed in a comparable manner and cannot always be found in mainstream reports (annual financial filings).

Our research revealed a gap between the largest and smaller-sized banks. Smaller banks do not disclose climate change as a source of financial risks.

Current disclosures lack detail on risk management, especially on the tools and metrics used to monitor climate-related risks. The major gap observed with the TCFD framework is related to the use of scenario analysis to inform strategy. Banks' capabilities do not appear to be mature enough to allow for the systematic use of scenario analysis.

CHALLENGE 1: MODELLING

Climate scenarios are primarily intended to serve policy and research, leaving banks with a gap to bridge between financial and scientific modelling.

CHALLENGE 2: DATA

Scenario analysis currently relies heavily on expert judgment due to a lack of comparable and comprehensive data on climate impacts for counterparties and sectors. Banks need to leverage external data sources and collect additional data from borrowers.

CHALLENGE 3: HORIZON

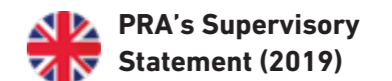
Climate change impacts have to be assessed beyond the relatively short-term horizon of risk analysis.



Who? All listed companies
What? Information about financial risks related to climate change; mitigation measures; consequences of climate change on activities and the use of goods and services produced.



Who? All companies
What? Clear, comparable and consistent information about the risks and opportunities related to climate change.



Who? Banks and insurers
What? Information about how climate-related financial risks are integrated into governance and risk management processes.

WHAT GOOD PRACTICE LOOKS LIKE



GOVERNANCE

Board oversight and role of management

Set a long-term strategic approach at board-level to be deployed in each service line and business.

Establish an executive Climate Change Committee

chaired by the bank's CRO with the involvement of executives responsible for the main business lines.

Allocation of clear roles and responsibilities

Incorporate in the Risk Committee Terms of Reference specific responsibilities for climate risk management.

Training and information

Organise training masterclass sessions to raise Board members awareness on climate issues.

Provide the Board with regular reports on key climate risk indicators and regulatory and other external developments.



SCENARIO ANALYSIS

Test portfolio resilience to climate change

Run simulations of portfolio financial performance under a range of temperature, emissions and carbon pricing scenarios and using long-term horizons (to 2050 and beyond). The climate scenarios to be published by the NGFS this year are expected to become a standard for regulators.

Alignment of lending portfolio with Paris Agreement objectives

Measure the level of alignment of your portfolios with the Paris targets applying some of the most commonly used methodologies (e.g. PACTA⁷). This will allow organisations to steer portfolio towards decarbonisation, reduce transition risks and identify new business opportunities.

7. Paris Agreement Capital Transition Assessment (PACTA), developed by the think tank 2° Investing Initiative and ING



RISK MANAGEMENT

Risk identification and measurement

Develop several internal climate scenarios to test the potential impacts of climate change on customers and assess exposures over various time horizons.

Risk mitigation

Consider excluding most carbon-intensive activities alongside with **limits on greenhouse gas emissions** for borrowers in specific credit policies.

Risk monitoring and reporting

Develop climate metrics (e.g. temperature alignment metrics) to monitor material risks.



DISCLOSURE

Alignment with the TCFD framework

Adopt the recommendations of the TCFD and incorporate TCFD disclosures in annual reports to improve transparency.

Provide detail on TCFD implementation timeline and progress made towards full alignment with the TCFD framework.

Other standards

Disclose banks' greenhouse gas emissions (scopes 1, 2 and 3) within the CDP framework.

LESSONS FROM 2019

Insights from 2019 TCFD reports⁸

Sharpen the strategy

Lloyds Banking Group set a clear goal to reduce carbon emissions it finances by more than 50% by 2030 and built a strategy around it.

Build scenario analysis capacity

HSBC partnered with climate change experts at MIT to produce exploratory transition scenarios.

RBS is developing its own internal climate scenario analysis and stress testing capability in preparation for the 2020 Biennial Exploratory Scenario (BES), as well as strengthening its climate risk management.

Adopt innovative tools to assess climate risks

In 2019, RBS performed a climate risk assessment of its UK mortgage portfolio, with a focus on physical flood risk and energy efficiency (EPC) related transition risk. To assess physical risk to its retail and commercial portfolios, RBS piloted geospatial tools to map flood risk against residential property in the UK.

Engage with clients

Lloyds Banking Group's customers⁹ are required to explain how they plan to reduce reliance on revenue from coal fired power stations and coal mines. The target is a reduction in revenue to less than 30% by 2025.

Standard Chartered stated it will only support group level clients that have reduced their exposure to thermal coal below 10% by 2030 and set interim targets to support the transition.

Improve disclosure

HSBC launched a pilot scheme to develop a series of new transition metrics to help disclose its customers' progress towards a low-carbon economy.

Standard Chartered disclosed for the first time its financed emission levels for the automotive and cement manufacturing portfolio.

8. At the date of finalisation of this report, only four banks had published their TCFD report: RBS, Lloyds, HSBC and Standard Chartered

9. Customers whose overall operations include coal mining and coal power generation or who supply equipment or services to the sector

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